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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,264	04/23/2001	Toshiharu Saito	Meic:047A	2896

7590 11/28/2003  
PARKHURST & WENDEL, L.L.P.  
Suite 210  
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Alexandria, VA 22314-2805

EXAMINER

NGUYEN, TAI V

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 11/28/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/839,264

Applicant(s)

SAITO ET AL.

Examiner

Tai Van Nguyen

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 September 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 41-55 is/are pending in the application.
- 4a) Of the above claim(s) 48-50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 41-47 and 51-55 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 09/295,328.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Election/Restrictions*

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 48-50, drawn to an aromatic tetracarboxylic acid di-anhydride,
- II. Claims 44 and 53, drawn to chemical oxy-polymerization.

The invention are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention of Group I has separate utility such as a chemical oxy-polymerization not required in Group II and invention Group II has separate utility such as aromatic tetracarboxylic acid di-anhydride not required in Group I. See MPEP § 806.05(d).

3. Claims 41, 42, 47 and 51 link(s) the inventions of Group I and II. The restriction requirement between the linked inventions is subject to the nonallowance of the linking claim(s), claims 41, 42, 47 and 51. Upon the allowance of the linking claim(s), the restriction requirement as to the linked inventions shall be withdrawn and any claim(s) depending from or otherwise including all the limitations of the allowable linking claim(s) will be entitled to examination in the instant application. Applicant(s) are advised that if any such claim(s) depending from or including all the limitations of the allowable linking claim(s) is/are presented in a continuation or divisional application, the claims of the continuation or divisional application may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

Where a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. *In re Ziegler*, 44 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

Newly submitted claims 48-50 directed to an invention that is independent or distinct from the invention originally claimed for reasons set forth above.

5. Since applicant has received an action on the merits for the originally presented invention (i.e. Group II), this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 48-50 have been withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

#### ***Response to Amendment***

6. The applicants' amendment filed 09/10/03 (paper No. 8) has been fully considered and made of record.

#### ***Claim Objections***

7. Claim 47 objected to because of the following informalities: Because "polyamide" (line 4) appears to be misspelled and should be recited as -- polyimide --. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 41-42, 44-46, 51-52 and 54 are rejected under 35 U.S.C. 102(b) as being anticipated by Harakawa et al (US 4,805,074).

As applied to claim 41, Harakawa et al discloses a method of manufacturing laminated capacitors, the method comprising the steps of: forming one of dielectrics made of organic high polymer, dielectrics made of organic high polymer (8, Fig. 3) and composite dielectrics made of organic high polymer and oxide of a metal comprising a conductor; forming an insulating layer (64, Fig 28) at least on the conductor (in Fig. 28); forming an opposite electrode (10) on the dielectrics to complete a capacitor element; laminating together a plurality of the capacitor elements (see Fig. 28); and forming an external connection terminal (61, Fig. 28).

As applied to claim 42, Harakawa discloses the dielectric is formed by electro-depositing organic high polymer (column 9, lines 65+).

As applied to claim 44, Harakawa discloses the chemical oxy-polymerization; or both chemical oxy-polymerization and electro-polymerization (see column 9, lines 65-68 and column. 10, lines 1-28).

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As applied to claims 45-46, Harakawa et al the opposite electrodes of the adjacent capacitors elements are bonded using conductive adhesive (graphite layer 9) during laminating a plurality of the capacitor elements.

As applied to claim 51, Harakawa et al discloses wherein at least a part of the opposite electrode is made of conductive polymer (column 3, lines 10-19).

As applied to claim 52, Harakawa et al wherein said conductive polymer is selected from the group consisting of polypyrrole (column 2, lines 55-65+).

As applied to claim 54, Harakawa et al wherein one of the conductor and the opposite electrode is one of a metal foil and a metal layer formed on a substrate ((column 9, lines 27-30).

### ***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 43 is rejected under 35 U.S.C. 103(a) as being unpatentable over Harakawa et al in view of Kudoh et al (US 5,140,502).

As applied to claim 43, Harakawa et al as relied upon above discloses all limitations of the claimed method except anodizing a metal the conductor.

However, Kodoh et al teach the step of anodizing of a metal the conductor

(see column 6, lines 12-21) for the purpose of providing less degrading of the interaction between the inorganic conductive layer and the dielectric film.

It would have been obvious to one of ordinary skill in the art at this time the invention was made to modify Harakawa et al by including the step of anodizing, as taught by Kudoh et al, to positively provide less degrading.

12. Claims 47 and 55 are rejected under 35 U.S.C. as being unpatentable over Harakawa in view of Higgins, III (US 5,212,402).

As applied to claim 47, Harakawa, disclose the method substantially as claimed above. However, Harakawa does not disclose that the organic polymer is a polyimide. Higgins III, discloses that the organic polymer can be a polyimide (column 3, line 55-57).

It would have been obvious to one ordinary skill in the art at this time the invention was made to have modified the Harakawa method by utilizing the material of the organic polymer as polyimide as taught by Higgins, III, to improve adhesion between the polymer and conductive leads.

As applied to claim 55, Harakawa, discloses the method substantially as claimed above. However, Harakawa method does not discloses that a metal layer is form by plating. Higgins III discloses a metal layer is formed by plating (see column 3, lines 63-68).

It would have been obvious to one of ordinary skill in the art at this time the invention was made to modified the Harakawa et al method providing a plating as taught by Higgins III, to mechanically support and adhesive bond signal lead.



13. Claim 53 is rejected 35 U.S.C. 103(a) as being unpatentable over Harakawa et al.

As applied to claim 53, It would have been an obvious matter design choice to choose any desired a conductive polymer is form by a chemical oxy-polymerization, since applicants have not disclosed that the claimed specific form by a chemical oxy-polymerization, solve any state problem or is for any particular purpose and it appears that the invention would perform well with forming by a chemical oxy-polymerization.

#### ***Response to Arguments***

14. Applicants argument filed 09/10/2003 has been fully considered but they are not persuasive.

In regards to the merits of Harakawa et al, the applicants contend that Harakawa does not teach "dielectrics made of a high polymer". The examiner most respectfully disagrees. Harakawa clearly discloses that his dielectric is a composite made of a organic high polymer that reduces electrical current and this resistance to electrical current would provide a good ability to withstand voltage (see column 2, lines 26-60).

With respect to claim 43 being mentioned with the 102 rejection of Harakawa, this recitation in the last Office Action (paper No. 7, paragraph No. 8) was a typographical error. The merits of claim 43 was relied upon in the combination of Harakawa and Kudoh et al.

The applicants further argue that Kudoh et al do not teach simultaneous electrodeposition of dielectrics. The applicant is correct, however, this feature was relied upon in the teaching of Harakawa et al (see column 10, line 8-13).

### ***Conclusion***

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tai Van Nguyen whose telephone number is 703-308-1791. The examiner can normally be reached on M-F (7:30-4:30).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

Tn.  
November 24, 2003



**A. DEXTER TUGBANG**  
**PRIMARY EXAMINER**